AUTHOR INDEX TO VOLUME 1

Abdurazakov, A. A., K. Ya. Gromov, V. V. Kuznetsov, Ma Ho Ik, G. Muziol, F. Molnar, A. Molnar, F. Mukhtasimov, and Han Shu-jun. On the Decay of Ho^{161} – 678.

Abov, Yu. G., P. A. Krupchitskiĭ and Yu. A. Oratovskiĭ. Existence of a Nucleon-Nucleon Potential That Does Not Conserve Spatial Parity – 341.

Afanas'ev, B. P. and V. I. Ostroumov. The $N^{14}(\pi,2p)3\alpha$ Reaction with 80-MeV π^+ Mesons – 463.

Afanas'eva, R. V., O. V. Lozhkin, V. M. Mal'tsev, and Yu. P. Yakovlev. Contribution to the Analysis of Muon Absorption in Matter at Large Depths – 51.

Aĭnutdinov, M. S., N. V. Vasil'eva, S. M. Zombkovskiĭ, Ya. M. Selektor, and V. N. Shulyachenko. Investigation of Four-Prong Stars in $\pi^- p$ Interactions at 3.5 GeV/c Primary Momentum – 763.

Akkerman, A. F., V. L. Kochetkov, and V. N. Chekanov. Lifetime of the 2^+ (603-keV) Level in Te^{124} – 527.

Aleksandrova, Z. A. (see Soldatov, A. S.) – 335.

Andreev, V. N. and S. M. Sirotkin. Search for the (n, α) Reaction in Heavy Nuclei Under the Action of Thermal Neutrons – 177

Apalin, V., Yu. Gritsyuk, I. Kutikov, V. Lebedev, and I. Mikaélyan. Neutron Emission from Fragments of U^{233}, U^{235}, and Pu^{239} in Thermal-Neutron Fission – 457.

Apalin, V., Yu. Gritsyuk, I. Kutikov, V. Lebedev, and I. Mikaélyan. Kinetic Energy of Fragments and Energy Balance in Thermal-Neutron Fission of U^{235} – 584.

Artemov, K. P., V. Z. Gol'dberg, B. I. Islamov, V. P. Rudakov, and I. N. Serikov. Elastic Scattering of He^3 Ions by Be^9, Ne^{14}, and O^{16} – 450.

Artemov, K. P., V. Z. Gol'dberg, B. I. Islamov, V. P. Rudakov, and I. N. Serikov. The Reaction (He^3, α) on Be^9, N^{14}, and O^{16} – 726.

Arutyunyan, F. R., K. A. Ispiryan, and A. G. Oganesyan. Coherent Radiation of 700–6000 BeV Cosmic Ray μ Mesons in a Laminar Medium – 604.

Avotina, M. P., E. P. Grigor'ev, B. S. Dzhelepov, and A. V. Zolotavin. Three Hour Activity of Lutecium – 684.

Azhgirei, L. S. Further Refinement of the Phase Shifts of pp Scattering at 435 MeV – 620.

Azhgirei, L. S., Yu. P. Kumekin, S. B. Nurushev, V. L. Solov'yanov, and G. D. Stoletov. Parameters for Triple Scattering of Protons by Carbon Nuclei at 660 MeV and a Comparison of the Results of the Analysis of NN and pC Scattering – 84.

Azimov, M. A., V. S. Pantuev, L. V. Sil'vestrov, M. N. Khachaturyan, and I. V. Chuvilo. Pion Charge Exchange Cross Section at 4 GeV/c – 100.

Azimov, S. A., B. P. Bannik, T. Visky, U. G. Gulyamov, Do In Seb, B. G. Rakhimbaev, and L. I. Chernova. Inelastic pp Interactions with Low Momentum Transfer – 485.

Azimov, S. A., E. V. Beter, and U. G. Gulyamov. Upper Limit of the Cross Section for Coherent Interactions of π^- Mesons with Heavy Emulsion Nuclei – 48.

Azimov, Ya. I., V. N. Gribov, G. S. Danilov, and I. T. Dyatlov. A Model for the Three-Particle Unitarity Condition for Complex Angular Momenta – 798.

Babenko, N. P., B. A. Bibichev, I. O. Konstantinov, A. P. Moskalev, and Yu. A. Nemilov. Neutron Polarization in (d, n) Stripping Reactions with $lp = 1$ – 323.

Babikov, V. V. Concerning the Calculation of the Parameters of Scattering by a Tensor Potential – 261.

Babikov, V. V. On the Calculation of the Nucleon-Nucleon Potential Scattering Parameters at Low Energies – 567.

Babikov, V. V. Concerning One Method of Calculation of Cross Sections in the Optical Model – 701.

Badalyan, A. M. The Cross Sections for the Processes $e^\pm + e^- \rightarrow e^\pm + \mu^- + \nu_e + \bar{\nu}_\mu$ – 219.

Balashko, Yu. G. and I. Ya. Barit. Analysis of Proton-Tritium Elastic Scattering Above the $T(p,n)$ He^3 Threshold – 153.

Balashov, V. V., G. Ya. Korenman, and T. S. Macharadze. Partial Transitions in the Photoproduction of Charged π Mesons from Light Nuclei – 479.

Baldin, A. M., B. B. Govorkov, S. P. Denisov, and A. I. Lebedev. Photoproduction of Neutral Pions Near to the Threshold – 62.

Balodis, M. K., V. A. Bondarenko, P. T. Prokof'ev, and L. I. Simonova. Spectrum of Internal-Conversion Electrons Produced Upon Capture of Thermal Neutrons by Indium – 175.

Bannik, B. P. (see Azimov, S. A.) – 485.

Baranov, S. A., M. K. Gadzhiev, V. M. Kulakov, and V. M. Shatinskiĭ, Pu^{241} Alpha Spectrum and U^{237} Energy Levels – 397.

Barit, I. Ya. (see Balashko, Yu. G.) – 153.

Barmin, V. V., A. G. Dolgolenko, Y. S. Elenskiĭ, I. A. Erofeev, Yu. S. Krestnikov, A. G. Meshkovskiĭ, G. D. Tikhomirov, Yu. V. Trebukhovskiĭ, and V. A. Shebanov. On the $f^0 \rightarrow \pi^0 + \pi^0$ Decay of the f^0-Meson – 230.

Barmin, V. V., A. G. Dolgolenko, I. A. Erofeev, Yu. S. Krestnikov, A. G. Meshkovskiĭ, G. D. Tikhomirov, Yu. V. Trebukhovskiĭ, and V. A. Shebanov. Detection of 1280-MeV K^0K^0 Resonance – 623.

Baryshevskiĭ, V. G., V. L. Lyuboshitz, and M. I. Podgoretskiĭ. Resonance Transitions of Waves in the Presence of Splitting – 19.

Batusov, Yu. A., S. A. Bunyatov, V. M. Sidorov, and V. A. Yarba. Double Charge Exchange of π^- Mesons – 271.

Batusov, Yu. A., S. A. Bunyatov, V. M. Sidorov, and V. A. Yarba. Total Cross Sections of the Reaction $\pi^- + p \rightarrow \pi^+ + \pi^- + n$ Near Threshold and Angular Distribution of Secondary Particles – 374.

Batusov, Yu. A., S. A. Bunyatov, V. M. Sidorov, and V. A. Yarba. The Reaction $\pi^- p \rightarrow \pi^+ + \pi^- n$ Near Threshold and $\pi\pi$ Interaction – 492.

Belov, V. P. Reactions with Production of Two Mesons and Unitary Symmetry – 809.

Belyaev, S. T. A Nucleon-Photon Hamiltonian for Spherical Nuclei – 3.

Belyaev, S. T. and V. G. Zelevinskiĭ. On the Energy Spectra of Odd Spherical Nuclei – 10.

Belyakov, V. A. and S. V. Khudyakov. Quadrupole Moments of Odd Spherical Nuclei – 532.

Belyakov, V. A., V. I. Veksler, N. M. Viryasov, E. N. Kladnitskaya, G. I. Kopylov, V. N. Penev, and M. I. Solov'ev. Baryon Resonances in $\pi^- p$ Interactions at 7.5 BeV With Strange-Particle Formation—240.

Belyakov, V. A., V. I. Veksler, N. M. Viryasov, E. N. Kladnitskaya, G. I. Kopylov, V. N. Penev, and M. I. Solov'ev. Meson Resonances in $\pi^- p$ Interactions at 7.5 BeV With Strange Particle Production—249.

Berson, I. Multiple Coulomb Excitation of Nuclei—325.

Beter, E. V. (see Azimov, S. A.)—48.

Bibichev, B. A. (see Babenko, N. P.)—323.

Bilen'kiĭ, S. M. and R. M. Ryndin. The $p+p \rightarrow \bar{l}+l$ Reaction with Polarized Particles—57.

Birbrair, B. L. and V. N. Guman. Excitation Spectra of Tl^{208} and Bi^{208}—693.

Blokhintsev, L. D. (See Dolinskiĭ, É. I.)—304.

Blokhintseva, T. D., V. G. Grebinnik, V. A. Zhukov, V. A. Kravtsov, G. Libman, L. I. Nemenov, G. I. Selivanov, and Yüan Jung-fang. Determination of the Contribution of the (3/2, 3/2) Isobar to the Inelastic $\pi^- p$ Interaction Processes at 344 MeV Meson Kinetic Energy—71.

Bochagov, B. A., S. S. Vasil'ev, G. G. Semenchuk, and G. E. Solyakin. Energy Characteristics of Fragments from Fission of Th^{232} and U^{238} by Charged Particles—328.

Bochkarev, V. N. and V. V. Nefedov. Radiation from the Inelastic Interaction of 14-MeV Neutrons With Magnesium, Aluminum, and Sulfur Nuclei—574.

Bogush, A. A., A. I. Bolsun, and I. S. Satsunkevich. Scattering of Antineutrinos by Electrons—204.

Bolsun, A. I. (see Bogush, A. A.)—204.

Bondarenko, V. A. (see Balodis, M. K.)—175.

Boos, É. G., A. Kh. Vinitskiĭ, and Zh. S. Takibaev. Angular Dependence of Transverse Pion Momentum—102.

Brill', O. D. He^3—Light Nucleus Interaction Cross Sections—37.

Budyanskiĭ, G. M. Multiple Scattering of a Narrow Beam of Fast Neutrons—155.

Bukarev, V. A. and V. I. Popov. Excitation of the Levels of La^{139} and Pr^{141} in Inelastic Neutron Scattering—316.

Bunatyan, G. G. and M. A. Mikulinskiĭ. Isotopic Shift and Quadrupole Moments of Near-Spherical Nuclei—26.

Bunyatov, S. A. (see Batusov, Yu. A.)—271, 374, 492.

Burgov, N. A. (see Kartashov, G. R.)—523.

Cerenkov, P. A. (see Denisov, F. P.)—234.

Chang Wen-yu (see Vishnevskiĭ, V. F.)—783.

Chekanov, V. N. (see Akkerman, A. F.)—527.

Chernev, Kh. (see Kirillova, L. F.)—379.

Chernova, L. I. (see Azimov, S. A.)—485.

Chiang Shao-chun (see Vishnevskiĭ, V. F.)—783.

Chikhladze, V. L. The New Isomers Ru^{95} and Ru^{101}—520.

Chikhladze, V. L. Internal Conversion Electron Spectrum of the Nuclear Reaction $Te^{128}(\alpha, 2n)\,Xe^{130}$—802.

Chkhaidze, L. V. (see Kotlyarevskiĭ, D. M.)—738.

Chou Mo-lung (see Zaĭtseva, N. G.)—273.

Chueva, S. A. (see Kruchinin, S. P.)—225.

Chumin, V. G. (see Zaĭtseva, N. G.)—273.

Chuvilo, I. V. (see Azimov, M. A.)—100.

Chuvilo, I. V. (see Kurbatov, V. S.)—195.

Chuvilo, I. V. (see Pantuev, V. S.)—93.

Dalkhazhav, N. (see Kirillova, L. F.)—379.

Damyanov, S. (see Kirillova, L. F.)—379.

Danagulyan, A. S. (see Gromov, K. Ya.)—140, 276.

Danilov, G. S. (see Azimov, Ya. I)—798.

Danilyan, G. V. Effect of Nonmonochromaticity in Measurements of the Cross-Section from Gamma Quantum Absorption by Light Nuclei—31.

Davydov, A. V. (see Kartashov, G. R.)—523.

Demin, A. G. and Yu. P. Kushakevich. New Isomers of Sc^{43}, In^{109}, and Xe^{125}—138.

Denisov, F. P. Energy Distributions of Recoil Nuclei in Evaporation—434.

Denisov, F. P., R. A. Latipova, V. P. Milovanov, and P. A. Cerenkov. Cascade Mechanism of the High Energy Nuclear Reactions. I. Total Inelastic Cross Sections, Angular and Energy Distribution of the Fast Particles—234.

Denisov, S. P. (see Baldin, A. M.)—62.

Do In Seb (see Azimov, S. A.)—485.

Dolgov, A. D., The Differential Cross Sections for the Processes $e^+e^- \rightarrow \mu^+\mu^-\nu_\mu\nu_\mu$ and $e^+e^- \rightarrow \mu^+\mu^-\nu_\mu\nu_\mu$—60.

Dolgov, A. D. and V. V. Solov'ev, Intermediate Meson Creation by Colliding Beams—615.

Dolgov, A. D., L. B. Okun', I. Ya. Pomeranchuk, and V. V. Solov'ev. Electromagnetic Mass Difference of Baryons and SU_6 Symmetry—521.

Dolgolenko, A. G. (see Barmin, V. V.)—230, 623.

Dolinskiĭ, É. I., L. D. Blokhintsev, and A. M. Mukhamedzhanov. Account of Initial and Final State Interactions in Direct Nuclear Reactions by the Diagram Summation Method—304.

Drozdov, S. I. Excitation of Nuclear Rotational States in Nucleon Scattering—290.

Dyatlov, I. T. (see Azimov, Ya. I.)—798.

Dzhafarov, I. G. Production of Pseudoscalar Mesons by Colliding Electron-Positron Beams—477.

Dzhelepov, B. S., N. N. Zhukovskiĭ, and A. G. Maloyan. The Gamma Spectrum of Eu^{152} with 9.2 hr Half-life—941.

Dzhelepov, B. S. (see Avotina, M. P.)—684.

Dzhelepov, B. S. (see Vitman, V. D.)—133, 669.

Dzhibuti, R. I., V. I. Mamasakhlisov, and T. S. Macharadze. Photonuclear Reactions with α-Particle Emission and Four-Particle Correlations in Light Nuclei—696.

Efremov, V. Ya. (see Vitman, V. D.)—669.

Élsmont, V. P. and V. A. Yurgenson, Search for Positron Emitters Among the Products of U^{235} Thermal Neutron Fission—129.

Élsmont, V. P. (see Nemilov, Yu. A.)—453.

Elenskiĭ, Ya. S. (see Barmin, V. V.)—230.

Enchev, D. A. (see Gromov, K. Ya.)—401.

Erő, J. (see Szentpétery, N.)—714.

Erofeev, I. A. (see Barmin, V. V.)—230, 623.

Fedorov, V. M. (see Vavilov, Yu. N.)—54.

Fedorov, V. V. and N. P. Klepikov. Planning of Experiments to Discriminate between Alternative Curves—736.

Feĭnberg, E. I. On Atomic Ionization in Beta Decay—438.

Firsov, E. I. (see Rudak, E. A.)—164.

Flerov, G. N. (see Lobanov, Yu. V.)—45.

Fodor, I. (see Szentpétery, N.)—714.

Fogel', P. Electromagnetic Transitions from Collective States—538.

Friš, I. (see Winternitz, P.)—636.

Gadzhiev, M. K. (see Baranov, S. A.)–397.
Gal'tsov, D. V. (see Sokolov, A. A.)–361.
Gangrskiĭ, Yu. P. and I. Kh. Lemberg. Coulomb Excitation of the First 2^+ Levels of Zr^{90} and Zr^{96}–731.
Gaponov, Yu. V. and V. P. Kralnov. Separation of the Angle Variables in the Equations for the Effective Field in Spherical Nuclei–410.
Gedalin, É. V., O. V. Kancheli, and S. G. Matinyan. Higher-Order Corrections in the Field Theory of Weak Interactions–630.
Gol'danskiĭ, V. I. The Effect of Pairing on the Penetration of Two Particles Through a Centrifugal Barrier–426.
Gol'dberg, V. Z. (see Artemov, K. P.)–450, 726.
Golovnya, V. Ya., A. P. Klyucharev, B. A. Shilyaev, and N. A. Shlyakhov. Elastic Scattering of Low-Energy Protons By Isotopes of Chromium, Iron, Nickel, and Cobalt–32.
Gordeev, I. V. Unified Theory of Nuclear Resonance Reactions. Partial Reaction Cross Sections–561.
Gordeeva, L. D. (see Soldatov, A. S.)–335.
Gorelik, R. B., N. P. Klepikov, and V. A. Yudin. Unitary Description of Reactions with Formation of Several Nonrelativistic Particles–105.
Goryachev, B. I., B. S. Ishkhanov, I. M. Kapitonov, V. G. Shevchenko, and B. A. Yur'ev. The Energy Distributions of Photoprotons from Si^{28}–716.
Govorkov, B. B. (see Baldin, A. M.)–62.
Grabowski, J. and B. N. Kalinkin. An Analytical Version of the Quasiclassical Theory of the Angular Distribution of the Products of a One-Nucleon Transfer Reaction–149.
Grachev, A. G. (see Vovenko, A. S.)–488.
Gramenitskiĭ, I. M., T. Kanarek, V. M. Mal'tsev, A. Prokes, and I. A. Tikhonova. Quasielastic $\pi^- n$ Interactions at 9 GeV–78.
Grebinnik, V. G. (see Blokhintseva, T. D.)–71.
Gribov, V. N. (see Azimov, Ya. I.)–798.
Grigor'ev, E. P. (see Avotina, M. P.)–684.
Grin', Yu. T. and V. M. Strutinskiĭ. Level Density of Thermodynamic Functions of the Atomic Nucleus with Allowance for Pairing Correlation Effects–299.
Gritsyuk, Yu. (see Apalin, V.)–457, 584.
Gritsyna, V. T., A. P. Klyucharev, and V. V. Remaev. The Isomers Gd^{159m} and Sb^{117g}–676.
Gromov, K. Ya., V. Hnatowicz, A. S. Danagulyan, A. T. Strigachev, and V. S. Shpinel'. On the Two-Hour (7.7 ksec) Isomer of Lu^{168}–140.
Gromov, K. Ya., A. S. Danagulyan, A. T. Strigachev, and V. S. Shpinel'. The $Lu^{167} \rightarrow Tu^{167}$ Decay Chain–276.
Gromov, K. Ya., D. A. Enchev, Zh. T. Zhelev, I. Zvol'skiĭ, V. G. Kalinnikov, V. V. Kuznetsov, Ma Ho Ik, G. Muziol, and Han Shu-jun. Investigation of the Decay Scheme of Tb^{152}–401.
Gromov, K. Ya. (see Abdurazakov, A. A.)–678.
Gulyamov, U. G. (see Azimov, S. A.)–48, 485.
Guman, V. N. (see Birbrair, B. L.)–693.
Gurvits, S. A. Properties of Branch Points Generated by Fermion Regge Poles–644.
Han Shu-jun (see Abdurazakov, A. A.)–678.
Han Shu-jun (see Gromov, K. Ya.)–401.
Han Shu-jun (see Zaitseva, N. G.)–273.
Hnatowicz, V. (see Gromov, K. Ya.)–140.
Ho Yuan-Fu (see Vovenko, A. S.)–488.
Iordanov, V. (see Kirillova, L. F.)–379.
Ishkhanov, B. S. (see Goryachev, B. I.)–716.
Islamov, B. I. (see Artemov, K. P.)–450,726.
Ispiryan, K. A. (see Arutyunyan, F. R.)–604.
Ivanov, Yu. P. (see Sokolov, A. A.)–361.
Kalinkin, B. N. (see Grabowski, J.)–149.
Kalinnikov, V. G. (see Gromov, K. Ya.)–401.
Kanarek, T. (see Gramenitskiĭ, I. M.)–78.
Kanavets, V. P., I. I. Levintov, and B. V. Morozov. Polarization in Elastic Proton-Proton Scattering at High Energies –65.
Kanavets, V. P., I. I. Levintov, B. V. Morozov, and N. A. Nikiforov. Measurement of the Energy Dependence of the Elastic *pp* Scattering Differential Cross Section at Energies from 3 to 9.5 BeV–90.
Kanazirski, Kh. (see Kirillova, L. F.)–379.
Kancheli, O. V. (see Gedalin, É. V.)–630.
Kapitonov, I. M. (see Goryachev, B. I.)–716.
Karnaukhov, V. A. and G. M. Ter-Akop'yan. Proton Decay of Nuclei with $Z > 50$–41.
Karnaukhov, V. A., G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin. Proton Emitter Based on the Ru + O^{18} Reaction–581.
Kartashov, G. R., N. A. Burgov, and A. V. Davydov. Type of Interaction in the β Decay of Ne^{23}–523.
Kazachenkov, Yu. N. Polarization Effects in Neutron Diffusion–547.
Kazarinov, Yu. M., V. I. Satarov, and Yu. N. Simonov. Total Cross Section for Interaction of 630 MeV Neutrons with Protons and Carbon Nuclei–191.
Kerimov, B. K. and Yu. I. Romanov. Energy Spectra of Longitudinally Polarized Recoil Electrons in Neutrino (Antineutrino)–Electron Scattering–613.
Khachaturyan, M. N. (see Azimov, M. A.)–100.
Khachaturyan, M. N. (see Kirillova, L. F.)–379.
Khachaturyan, M. N. (see Pantuev, V. S.)–93.
Khapaev, M. M. Stability of Motion of a Charged Particle in a Magnetic Field–193.
Kharchenko, V. F. (see Sitenko, A. G.)–708.
Kharitonov, Yu. I. (see Sliv, L. A.)–804.
Kharkats, Yu. I. (see Pikin, S. A.)–207.
Khodel', V. A. (see Troitskiĭ, M. A.)–143.
Khrenov, B. A. Lateral Distribution of Muon Fluxes in Extensive Air Showers–384.
Khriplovich, I. B. The Asymptotic Behavior of Cross Sections and Potential Scattering–651.
Khriplovich, I. B. (see Vaĭnshtein, A. I.)–648.
Khristov, L. G. (see Kirillova, L. F.)–379.
Khudyakov, S. V. (see Belyakov, V. A.)–532.
Kirillova, L. F., V. A. Nikitin, V. S. Pantuev, V. A. Sviridov, L. N. Strunov, M. N. Khachaturyan, L. G. Khristov, M. G. Shafranova, Z. Korbel, L. Rob, S. Damyanov, A. Zlateva, Z. Zlatanov, V. Iordanov, Kh. Kanazirski, P. Markov, T. Todorov, Kh. Chernev, N. Dalkhazhav, and T. Tuvdendorzh. Small-Angle Elastic *pp* and *pd* Scattering in the Energy Interval 2–10 GeV–379.
Kladnitskaya, E. N. (see Belyakov, V. A.)–240, 249.
Klepikov, N. P. (see Fedorov, V. V.)–736.
Klepikov, N. P. (see Gorelik, R. B.)–105.

Klyucharev, A. P. (see Golovnya, V. Ya.)–32.
Kobzarev, I. Yu. and L. B. Okun', The $\Delta T = 1/2$ Rule for Hadron Decay–111.
Kobzarev, I. Yu. and L. B. Okun'. Current-Current Multiplication and the Admixture of $\Delta T = 3/2$ in Λ-hyperon Decay–807.
Kobzarev, I. Yu. (see Zakharov, V. I.)–749.
Kochetkov, V. I. (see Akkerman, A. F.)–527.
Kolesnikov, L. Ya. (see Vatset, P. I.)–579.
Kolganova, É. D. (see, Vaĭsenberg, A. O.)–467.
Komar, A. A. and V. I. Man'ko. Some Aspects of the Physical Applications of the Unitary Groups–496.
Komissarova, V. A., A. A. Sorokin, and V. S. Shpinel'. Angular Distribution of Resonant Scattering of 23.8 keV Gamma Quanta from Sn^{119} Nuclei–444.
Konstantinov, I. O. (see Babenko, N. P.)–323.
Kopaleĭshvili, T. I. Absorption of γ Rays and Stopped π^- Mesons by Nuclei with Two-Nucleon Emission and the Structure of Light Nuclei–686.
Kopylov, G. I. (see Belyakov, V. A.)–240, 249.
Korbel, Z. (see Kirillova, L. F.)–379.
Korenman, G. Ya. (see Balashov, V. V.)–479.
Kotlyarevskiĭ, D. M., A. N. Mestvirishvili, D. Neagu, É. O. Okonov, N. I. Petrov, V. A. Rusakov, L. V. Chkhaidze, and Wu Tsung-fan. Investigation of the Energy Spectra and Angular Correlations of Particles in $K_s^0 \to \pi^+ + e^- + \nu$ Decay–738.
Kraĭnov, V. P. (see Gaponov, Yu. V.)–410.
Kravtsov, V. A. (see Blokhintseva, T. D.)–71.
Krestnikov, Yu. S. (see Barmin, V. V.)–230, 623.
Kruchinin, S. P., K. N. Mukhin, A. S. Romantseva, I. A. Svetlolobov, M. M. Sulkovskaya, S. A. Chueva, and R. S. Shlyapnikov. Elastic *pp* Scattering at 1.45 BeV–225.
Krupchitskiĭ, P. A. (see Abov, Yu. G.)–341.
Kuchin, I. A. and P. A. Usik. Concerning Hyperon Production in πN and NN Collisions–389.
Kuchin, I. A., L. A. San'ko, and P. A. Usik. Charge Exchange of Nucleons in Inelastic NN Interactions at Very High Energies–627.
Kulakov, V. M. (see Baranov, S. A.)–397.
Kumekin, Yu. P. (see Azhgireĭ, L. S.)–84.
Kumpf, H., L. Kumpf, and Shih Shuang-hui. Neutron Spectra in Interactions of Heavy Ions with Intermediate Nuclei–186.
Kumpf, L. (see Kumpf, H.)–186
Kurbatov, V. S., É. I. Mal'tsev, A. I. Maslakov, I. V. Chuvilo, and A. I. Shklovskaya. Two Cases of the Radiative Decay $K^+ \to \pi^+ + \pi^0 + \gamma$–195.
Kushakevich, Yu. P. (see Demin, A. G.)–138.
Kutikov, I. (see Apalin, V.)–457, 584.
Kuz'min, V. N. (see Zhdanov, A. P.)–447.
Kuznetsov, V. I. (see Lobanov, Yu. V.)–45.
Kuznetsov, V. V. (see Abdurazakov, A. A.)–678.
Kuznetov, V. V. (see Gromov, K. Ya.)–401.
Kuznetsov, V. V. (see Zaĭtseva, N. G.)–273.
Kuznetsova, M. Ya. (see Zaĭtseva, N. G.)–273.
Latipova, R. A. (see Denisov, F. P.)–234.
Lebedev, A. I. (see Baldin, A. M.)–62.
Lebedev, V. (see Apalin, V.)–457, 584.
Lemberg, I. Kh. (see Gangrskiĭ, Yu. P.)–731.
Lepekhin, F. G., M. M. Makarov, and L. N. Tkach. Possible Application of Evaporation Theory to Multiply Charged Particle Emission by Heavy Nuclei–703.
Levintov, I. I. (see Kanavets, V. P.)–65, 90.
Libman, G. (see Blokhintseva, T. D.)–71.
Likhachev, M. F. (see Vovenko, A. S.)–488.
Lobanov, Yu. V., V. I. Kuznetsov, V. P. Perelygin, S. M. Polikanov, Yu. Ts. Oganesyan, and G. N. Flerov. Spontaneously Fissile Isomer with 0.9 Msec Half-Life–45.
Lomonosov, V. V., and M. G. Urin. The Interaction of Beta and Gamma Bands in Deformed Nuclei–22.
Lozhkin, O. V. (see Afanas'eva, R. V.)–51.
Lushchikov, V. I. and Yu. V. Taran. Dynamic Polarization of Protons in a Large-Volume Target–609.
Lushnikov, A. A. and M. G. Urin. Quadrupole Giant Resonance in Heavy Nuclei–311.
Lyagin, I. V., Spectra of K_{e5} Decay–473.
Lyuboshitz, V. L., É. O. Okonov, and M. I. Podgoretskiĭ. Galactic Hypercharge Field and the Two-Pion Decay of the Longlived Neutral K Mesons–349.
Lyuboshitz, V. L., É. O. Okonov, M. I. Podgoretskiĭ, and Wu Tsung-fan. Violation of CP-Invariance and Interference Phenomena in the Decay of a Neutral K Meson into Two π Mesons–354.
Lyuboshitz, V. L. (see Baryshevskiĭ, V. G.)–19.
Lyul'ka, V. A. and A. A. Startsev. KN Scattering at Low Temperatures–778.
Ma Ho Ik (see Abdurazakov, A. A.)–678.
Ma Ho Ik (see Gromov, K. Ya.)–401.
Ma Ho Ik (see Zaĭtseva, N. G.)–273.
Macharadze, T. S. (see Balashov, V. V.)–479.
Macharadze, T. S. (see Dzhibuti, R. I.)–696.
Makarov, M. M. (see Lepekhin, F. G.)–703.
Makarov, S. P. (see Mekhedov, V. N.)–592.
Maloyan, A. G. (see Dzhelepov, B. S.)–671.
Mal'tsev, É. I. (see Kurbatov, V. S.)–195.
Mal'tsev, V. M. (see Afanas'eva, R. V.)–51.
Mal'tsev, V. M. (see Gramenitskiĭ, I. M.)–78.
Mal'tseva, N. S. (see Mekhedov, V. N.)–592.
Mal'tseva, N. S. (see Zing He-sung)–132.
Mamasakhlisov, V. I. (see Dzhibuti, R. I.)–696.
Mandel'tsveĭg, V. B. The Structure of G_2 Multiplets–787.
Mandel'tsveĭg, V. B. and M. B. Menskiĭ. Unitary Multiplet Mixtures–392.
Mandritskaya, K. V. (see Rolnishvili, N. N.)–733.
Man'ko, V. I. (see Komar, A. A.)–496.
Marish, K. S. Some Consequences of the Application of Unitary Symmetry Theory to the Systematics of Strongly Interacting Particles–629.
Markov, M. A. (see Zheleznykh, I. M.)–215.
Markov, P. (see Kirillova, L. F.)–379.
Maslakov, A. I. (see Kurbatov, V. S.)–195.
Matinyan, S. G. (see Gedalin, E. V.)–630.
Matulenko, Yu. A. (see Vovenko, A. S.)–488.
Mekhedov, V. N., V. N. Rybakov, N. S. Mal'tseva, S. P. Makarov, and Wang Ch'uan P'eng. Study of Secondary Reactions in Bombardment of Copper by 140–660 MeV Protons–592.
Mekhedov, V. N. (see Zing He-sung)–132.
Menskiĭ, M. B. (see Mandel'tsveĭg, V. B.)–392.

Meshkovskiĭ, A. G. (see Barmin, V. V.)—230, 623.
Mestvirishvili, A. N. (see Kotlyarevskiĭ, D. M.)—738.
Mikaélyan, L. (see Apalin, V.)—457, 584.
Mikaélyan, L. A., P. E. Spivak, and V. G. Tsinoev. Suggested Experiments on Low-Energy Antineutrino Physics—611.
Mikhailov, V. D. The Process of Pair Production by Fast Muons—223.
Mikulinskiĭ, M. A. (see Bunatyan, G. G.)—26.
Milovanov, V. P. (see Denisov, F. P.)—234.
Molnar, A. (see Abdurazakov, A. A.)—678.
Molnar, F. (see Abdurazakov, A. A.)—678.
Moroz, V. I. (see Vishnevskiĭ, V. F.)—783.
Morozov, B. V. (see Kanavets, V. P.)—65, 90.
Moskalev, A. P. (see Babenko, N. P.)—323.
Mukhamedzhanov, A. M. (see Dolinskiĭ, É. I.)—304.
Mukhin, K. N. (see Kruchinin, S. P.)—225.
Mukhtasimov, F. (see Abdurazakov, A. A.)—678.
Murzin, V. S. Analysis of Methodological Errors in the Study of Nuclear Interactions by the Emulsion Method—599.
Murzina, E. A., S. I. Nikol'skiĭ, E. I. Tukish, and V. I. Yakovlev. Nuclear-Active High-Energy Particles and the Accompanying Cosmic-Ray Extensive Air Showers—768.
Muskalu Shtefan (see Popova, A. M.)—555.
Muziol, G. (see Abdurazakov, A. A.)—678.
Muziol, G. (see Gromov, K. Ya.)—401.
Muziol, G. (see Zaĭtseva, N. G.)—273.
Neagu, D. (see Kotlyarevskiĭ, D. M.)—738.
Nefedov, V. V. (see Bochkarev, V. N.)—574.
Nemenov, L. L. (see Blokhintseva, T. D.)—71.
Nemets, O. F., M. V. Sokolov, and B. G. Struzhko. Investigation of Angular and Energy Correlations in the Ni(d, np)Ni Reaction by the Neutron-Proton Coincidence Method—722.
Nemilov, Yu. A., V. V. Pavlov, Yu. A. Selitskiĭ, S. M. Solov'ev, and V. P. Élsmont. Mass and Kinetic Energy Distributions of Fragments from Fission of Th^{232} by 12-MeV Deuterons—453.
Nemilov, Yu. A. (see Babenko, N. P.)—323.
Nikiforov, N. A. (see Kanavets, V. P.)—90.
Nikitin, A. V. (see Vishnevskiĭ, V. F.)—783.
Nikitin, V. A., A. A. Nomofilov, V. A. Sviridov, L. A. Slepets, I. M. Sitnik, and L. N. Strunov. Measurement of the Real Part of the $\pi^- p$ Elastic Scattering Amplitude for 3.5 BeV—127.
Nikitin, V. A. (see Kirillova, L. F.)—379.
Nikol'skiĭ, S. I. (see Murzina, E. A.)—768.
Nomofilov, A. A. (see Nikitin, V. A.)—127.
Nurushev, S. B. (see Azhgirei, L. S.)—84.
Oganesyan, A. G. (see Arutyunyan, F. R.)—604.
Oganesyan, Yu. Ts. (see Lobanov, Yu. V.)—45.
Okonov, É. O. (see Kotlyarevskiĭ, D. M.)—738.
Okonov, É. O. (see Lyuboshitz, V. L.)—349, 354.
Okorokov, V. V. and D. L. Tolchenkov. Neutron Spectra and Angular Distributions in (d, n) Reactions in Nuclei with Medium Atomic Weights—320.
Okun', L. B., Supercharge and Supercharged Particles—211.
Okun', L. B., Note Concerning CP Parity—670.
Okun', L. B. Note on CP-Odd Interactions with $|\Delta S| > 1$—806.
Okun', L. B. (see Dolgov, A. D.)—521.
Okun', L. B. (see Kobzarev, I. Yu.)—111, 807.
Oratovskiĭ, Yu. A. (see Abov, Yu. G.)—341.
Ostroumov, V. I. (see Afanas'ev, B. P.)—463.
Pantuev, V. S., M. N. Khachaturyan, and I. V. Chuvilo. Total Cross Sections for Interaction of Neutrons with Protons and Neutrons from 2.6 to 8.3 BeV—93.
Pantuev, V. S. (see Azimov, M. A.)—100.
Pantuev, V. S. (see Kirillova, L. F.)—379.
Pavlov, V. V. (see Nemilov, Yu. A.)—453.
Penev, V. N. (see Belyakov, V. A.)—240, 249.
Perelomov, A. M. Polarization Effects in the Scattering of Neutrinos by Electrons with Account of Radiative Corrections—746.
Perelygin, V. P. (see Lobanov, Yu. V.)—45.
Petrov, G. A. Energy Dependence of the Angular Anisotropy of the Gamma Radiation Accompanying the Fission of U^{235}—338.
Petrov, L. A. (see Karnaukhov, V. A.)—581.
Petrov, N. I. (see Kotlyarevskiĭ, D. M.)—738.
Pikin, S. A. and Yu. I. Kharkats. On the Decay $\pi \to \mu + \nu + e^+ + e^-$—207.
Pivovarov, V. G. (see Vasev, V. G.)—373.
Podgoretskiĭ, M. I. (see Baryshevskiĭ, V. G.)—19.
Podgoretskiĭ, M. I. (see Lyuboshitz, V. L.)—349, 354.
Polikanov, S. M. (see Lobanov, Yu. V.)—45.
Pomeranchuk, I. Ya. (see Dolgov, A. D.)—521.
Pontecorvo, J. B. and R. M. Sulyaev, Michel Parameter in $\mu^- - e^-$ Decay—200.
Popov, V. I. (see Bikarev, V. A.)—316.
Popova, A. M. and Muskalu Shtefan. Inelastic Nucleon-Deuteron Scattering at Low and Medium Energies—555.
Prokes, A. (see Gramenitskiĭ, I. M.)—78.
Prokof'ev, A. I. (see Velyukhov, G. E.)—719.
Prokof'ev, P. T. (see Balodis, M. K.)—175.
Pugacheva, G. I. (see Vavilov, Yu. N.)—54.
Rabin, N. V. (see Vaĭsenberg, A. O.)—467.
Rakhimbaev, B. G. (see Azimov, S. A.)—485.
Rekalo, M. P. The Okubo Mass Formula in Higher Orders—259.
Rekalo, M. P. Electromagnetic Production of Hadrons and Unitary Symmetry.—364.
Rekalo, M. P. On a Possibility of Determining Nuclear Form Factors for Time-Like Momentum Transfers—760.
Remaev, V. V. (see Gritsyna, V. T.)—676.
Rob, L. (see Kirillova, L. F.)—379.
Roinshvili, N. N. and K. V. Mandritskaya. Analysis of Experimental Data Satisfying Distributions of the Type $x^m dx$—733.
Romanov, S. A. and F. L. Shapiro. Neutron-Capture Cross Sections in Scandium and the Radiation Widths of the Sc^{45} and Cl^{35} Resonances—159.
Romanov, Yu. I. (see Kerimov, B. K.)—613.
Romantseva, A. S. (see Kruchinin, S. P.)—225.
Rudak, É. A. and E. I. Firsov, Gamma-Ray Spectra from the (n, γ) Reaction in Cr^{50}, Cr^{52}, and Cr^{53}—164.
Rudakov, V. P. (see Artemov, K. P.)—450, 726.
Rusakov, V. A. (see Kotlyarevskiĭ, D. M.)—738.
Rybakov, V. N. (see Mekhedov, V. N.)—592.
Rybakov, V. N. (see Zing He-sung)—132.

Ryndin, R. M. (see Bilen'kiĭ, S. M.)—57.
San'ko, L. A. (see Kuchin, I. A.)—627.
Sapershteĭn, É. E. and M. A. Troitskiĭ. Mass Difference of Near-Magic Nuclei—284.
Satarov, V. I. (see Kazarinov, Yu. M.)—191.
Satsunkevich, I. S. (see Bogush, A. A.)—204.
Savin, I. S. (see Vovenko, A. S.)—488.
Selektor, Ya. M. (see Alnutdinov, M. S.)—763.
Selitskiĭ, Yu. A. (see Nemilov, Yu. A.)—453.
Selivanov, G. I. (see Blokhintseva, T. D.)—71.
Semenchuk, G. G. (see Bogachov, B. A.)—328.
Semenko, S. F. Influence of Surface Vibrations in Strongly Deformed Nuclei on the Character of Their Dipole Excitation—295.
Serikov, I. N. (see Artemov, K. P.)—450, 726.
Shabad, A. E. (see Slavnov, A. A.)—514.
Shafranova, M. G. (see Kirillova, L. F.)—379.
Shakhbazyan, B. A. (see Vishnevskiĭ, V. F.)—783.
Shapiro, F. L. (see Romanov, S. A.)—159.
Shatinskiĭ, M. V. (see Baranov, S. A.)—397.
Shcherbin, Yu. P., On the Effect of Three-Body Forces in H^3 and He^3—667.
Shebanov, V. A. (see Barmin, V. V.)—230, 623.
Shevchenko, V. G. (see Goryachev, B. I.)—716.
Shih Shuang-hui (see Kumpf, H.)—186.
Shilyaev, B. A. (see Golovnya, V. Ya.)—32.
Shklovskaya, A. I. (see Kurbatov, V. S.)—195.
Shlyakhov, N. A. (see Golovnya, V. Ya.)—32.
Shlyapnikov, R. S. (see Kruchinin, S. P.)—225.
Shpinel', V. S. (see Gromov, K. Ya.)—140, 276.
Shpinel', V. S. (see Komissarova, V. A.)—444.
Shulyachenko, V. N. (see Alnutdinov, M. S.)—763.
Sidorov, V. M. (see Batusov, Yu. A.)—271, 374, 492.
Sil'vestrov, L. V. (see Azimov, M. A.)—100.
Simonov, Yu. N. (see Kazarinov, Yu. M.)—191.
Simonova, L. I. (see Balodis, M. K.)—175.
Sirotkin, S. M. (see Andreev, V. N.)—177.
Sitenko, A. G. and V. F. Kharchenko. The Neutron-Deuteron Doublet Scattering Length and the Three-Nucleon Bound State with Account of Tensor Forces—708.
Sitnik, I. M. (see Nikitin, V. A.)—127.
Slavnov, A. A. and A. E. Shabad. Elimination of Unphysical Singularities in the Feinberg-Pais Theory of Weak Interactions—514.
Slepets, L. A. (see Nikitin, V. A.)—127.
Sliv, L. A. and Yu. I. Kharitonov. Isospin in Heavy Nuclei—804.
Smirenkin, G. N. (see Soldatov, A. S.)—335.
Smorodinskiĭ, Ya. A. (see Winternitz, P.)—113.
Sokolov, A. A., Yu. P. Ivanov, and D. V. Gal'tsov. Influence of Spin Effects on the Annihilation and Creation of Electron-Positron Pairs in Weak Interactions—361.
Sokolov, M. V. (see Nemets, O. F.)—722.
Sokolov, V. V. (see Vaĭnshtein, A. I.)—648.
Soldatov, A. S., Z. A. Aleksandrova, L. D. Gordeeva, and G. N. Smirenkin. Angular Distribution of Fragments in Photofission of U^{238} and Th^{232} by γ Rays from the Reaction $F^{19}(p,\alpha\gamma)O^{16}$—335.
Solov'ev, M. I. (see Belyakov, V. A.)—240, 249.
Solov'ev, S. M. (see Nemilov, Yu. A.)—453.
Solov'ev, V. V. (see Dolgov, A. D.)—521, 615.
Solov'yanov, V. L. (see Azhgireĭ, L. S.)—84.
Solyakin, G. E. (see Bochagov, B. A.)—328.
Sorokin, A. A. (see Komissarova, V. A.)—444.
Spivak, P. E. (see Mikaélyan, L. A.)—611.
Startsev, A. A. (see Lyul'ka, V. A.)—778.
Stepanov, B. (see Zav'yalov, O. I.)—658.
Stoletov, G. D. (see Azhgireĭ, L. S.)—84.
Strigachev, A. T. (see Gromov, K. Ya.)—140, 276.
Strokov, Yu. F. Interaction of Antiproton With Proton With Account of Coulomb Forces and Mass Difference Between the Neutron and the Proton at Nonrelativistic Energies—507.
Struminskiĭ, B. V. A Strong Interaction Symmetry Model Based on Sp_6—501.
Strunov, L. N. (see Nikitin, V. A.)—127.
Strunov, L. N. (see Kirillova, L. F.)—379.
Strutinskiĭ, V. M. A Simple Description of the Angular Distribution of Compound Nucleus Decay Products Following a Direct Interaction—421.
Strutinskiĭ, V. M. Form of the Fissioning Nucleus at the Saddle Point and the Liquid-Drop Model of the Nucleus—588.
Strutinskiĭ, V. M. (see Grin', Yu. T.)—299.
Struzhko, B. G. (see Nemets, O. F.)—722.
Subbotin, V. G. (see Karnaukhov, V. A.)—581.
Sulkovskaya, M. M. (see Kruchinin, S. P.)—225.
Sulyaev, R. M. (see Pontecorvo, J. B.)—200.
Surkov, E. L. Theory of Crossing Symmetry and Helicity Amplitudes—792.
Suy Yung-Ch'ang (see Vovenko, A. S.)—488.
Svetlolobov, I. A. (see Kruchinin, S. P.)—225.
Sviridov, A. A. (see Kirillova, L. F.)—379.
Sviridov, A. A. (see Nikitin, V. A.)—127.
Szentpétery, N., J. Erő, I. Fodor, and J. Zimányi. Circular Polarization of Gamma Rays Associated with the Reaction $B^{10}(d,p)B^{11}$—714.
Takibaev, Zh. S. (see Boos, É. G.)—102.
Taran, Yu. V. (see Lushchikov, V. I.)—609.
Ter-Akop'yan, G. M. (see Karnaukhov, V. A.)—41, 581.
Tikhomirov, G. D. (see Barmin, V. V.)—230, 623.
Tikhonova, L. A. (see Gramenitskiĭ, I. M.)—78.
Tkach, L. N. (see Lepekhin, F. G.)—703.
Todorov, T. (see Kirillova, L. F.)—379.
Tolchenkov, D. L. (see Okorokov, V. V.)—320.
Tolstov, K. D. Form of Momentum Spectrum in Particle Collision—597.
Tonapetyan, S. G. (see Vatset, P. I.)—579.
Terbukhovskiĭ, Yu. B. (see Barmin, V. V.)—230, 623.
Troitskiĭ, M. A. Isotopic Shift of Hyperfine Splitting of Atomic Levels—543.
Troitskiĭ, M. A. and V. A. Khodel'. Calculation of Magnetic Moments of Spherical Nuclei—143.
Troitskiĭ, M. A. (see Sapershteĭn, É. E.)—284.
Troyan, Yu. A. (see Vishnevskiĭ, V. F.)—783.
Tsinoev, V. G. (see Mikaélyan, L. A.)—611.
Tsukerman, I. S., The Angular Correlation Between π Meson and Leptons and the Determination of Form-factors in $K_{\mu 3}$ Decay—221.
Tu Yuan-tsái (see Vishnevskiĭ, V. F.)—783.

Tukish, E. I. (see Murzina, E. A.)—768.
Tuvdendorzh, T. (see Kirillova, L. F.)—379.
Tyapin, A. S. Compressibility and Polarizability of Nuclear Matter—416.
Uhlíř, M. (see Winternitz, P.)—113.
Urin, M. G. (see Lomonosov, V. V.)—22.
Urin, M. G. (see Lushnikov, A. A.)—311.
Usik, P. A. (see Kuchin, I. A.)—389, 627.
Vaĭnshteĭn, A. I., V. V. Sokolov, and I. B. Khriplovich. The Lehmann Representation and the Photon Mass—648.
Vaĭsenberg, A. O., É. D. Kolganova, and N. V. Rabin. Disintegration of Emulsion Nuclei by Slow μ^- Mesons—467.
Valuev, B. N. Reduction Formulas and Representations of Amplitudes for n-Vertex Graphs—510.
Vasev, V. G. and V. G. Pivovarov. Mass Difference of Rho Mesons—373.
Vasil'ev, S. S. (see Bochagov, B. A.)—328.
Vasil'eva, N. V. (see Arnutdinov, M. S.)—763.
Vatset, P. I., L. I. Kolesnikov, and S. G. Tonapetyan. Neutron Emission in Interactions Between Tritons and Boron Nuclei—579.
Vavilov, Yu. N., G. I. Pugacheva, and V. M. Fedorov. Contribution to the Analysis of Muon Absorption in Matter at Large Depths—54.
Veksler, V. I. (see Belyakov, V. A.)—240, 249.
Velyukhov, G. E. and A. I. Prokof'ev. Interaction of 14.1-MeV Neutrons with Tritium—719.
Vinitskiĭ, A. Kh. (see Boos, É. G.)—102.
Viryasov, N. M. (see Belyakov, V. A.)—240, 249.
Visky, T. (see Azimov, S. A.)—485.
Vishnevskiĭ, V. F., Tu Yuan-tsái, V. I. Moroz, A. V. Nikitin, Yu. A. Troyan, Chiang Shao-chun, Chang Wen-yu, B. A. Shakhbazyan, and Yen Wu-kuang. Concerning the Applicability of the Isobar Model for the Production of Λ Hyperons in $\pi^- p$ Interactions—783.
Vitman, V. D., N. A. Voinova, and B. S. Dzhelepov. New Data for the Re^{188} Decay Scheme—133.
Vitman, V. D., B. S. Dzhelepov, and V. Ya. Efromov, Positrons of Lu^{171}—669.
Vladimirskiĭ, V. V. Possibility of the Existence of a Boson 27—Supermultiplet 1^+—269.
Voinova, N. A. (see Vitman, V. D.)—133.
Vovenko, A. S., A. G. Grachev, M. F. Likhachev, Yu. A. Matulenko, I. S. Savin, Suy Yung-Ch'ang, and Ho Yuan-Fu. Elastic Scattering of Positive π Mesons by 3.2 BeV/c Protons—488.
Wang Ch'uan P'eng (see Mekhedov, V. N.)—592.
Winternitz, P., Ya. A. Smorodinskiĭ, and M. Uhlíř. On Relativistic Angular Momentum Theory—113.
Winternitz, P. and I. Fris. Invariant Expansions of Relativistic Amplitudes and Subgroups of the Proper Lorentz Group—636.
Wu Tsung-fan (see Kotlyarevskiĭ, D. M.)—738.
Wu Tsung-fan (see Lyuboshitz, V. I.)—354.
Yakovlev, R. M. (see Zhdanov, A. P.)—447.
Yakovlev, V. I. (see Murzina, E. A.)—768.
Yakovlev, Yu. P. (see Afanas'eva, R. V.)—51.
Yarba, V. A. (see Batusov, Yu. A.)—271, 374, 492.
Yen Wu-kuang (see Vishnevskiĭ, V. F.)—783.
Yüan Jung-fang (see Blokhintseva, T. D.)—71.
Yudin, V. A. (see Gorelik, R. B.)—105.
Yur'ev, B. A. (see Goryachev, B. I.)—716.
Yurgenson, V. A. (see Élsmont, V. P.)—129.
Zaĭtseva, N. G., V. V. Kuznetsov, M. Ya. Kuznetsova, Ma Ho Ik, G. Muziol, Han Shu-jun, Chou Mo-lung, and V. G. Chumin. New Neutron-Deficient Zirconium Isotopes—273.
Zakharov, V. I., Unitary Symmetry and K_{l4} Decay—751.
Zakharov, V. I. and I. Yu. Kobzarev, Vector Coupling Constants of Strangeness-Violating Currents in the Second Approximation in the Semi-Strong Interaction—749.
Zav'yalov, O. I. and B. Stepanov, Asymptotics of Diverging Feynman Graphs—658.
Zelevinskiĭ, V. G. (see Belyaev, S. T.)—10.
Zharkov, G. F. Pion Emission and Beta Decay of a Proton Moving in a Magnetic Field—120.
Zhdanov, A. P., V. N. Kuz'min, and R. M. Yakovlev. Knock-On of Alpha Particles from Be Nuclei by 660 MeV Protons—447.
Zhelev, Zh. T. (see Gromov, K. Ya.)—401.
Zheleznykh, I. M. A Covariant Method of Calculating Cross-Sections and Its Application to Some Reactions Induced by Neutrinos—753.
Zheleznykh, I. M. and M. A. Markov. A Possibility for Detecting the Intermediate Meson with Mass Larger Than Twice the Nucleon Mass—215.
Zhivopistsev, F. A. The Method of Quantum Green Functions in Nuclear Reaction Theory—429.
Zhukov, V. A. (see Blokhintseva, T. D.)—71.
Zhukovskiĭ, N. N. (see Dzhelepov, B. S.)—671.
Zimányi, J. (see Szentpétery, N.)—714.
Zing He-sung, N. S. Mal'tseva, V. N. Mekhedov, and V. N. Rybakov. The K-Capture Fraction of Ge^{66}, Ge^{69}, and As^{72}—132.
Zlatanov, Z. (see Kirillova, L. F.)—379.
Zlateva, A. (see Kirillova, L. F.)—379.
Zolotavin, A. V. (see Avotina, M. P.)—684.
Zombkovskiĭ, S. M. (see Arnutdinov, M. S.)—763.
Zvol'skiĭ, I. (see Gromov, K. Ya.)—401.

ANALYTIC SUBJECT INDEX TO VOLUME I

Electromagnetic Interactions of Elementary Particles
Methods, Accelerators
Nuclear Properties and Nuclear Spectroscopy (Experiment)
Nuclear Reactions and Scattering by Nuclei at High Energies (>100 MeV)
Nuclear Reactions and Scattering (Experiment) (Classified by primary particles, except fission)
Nuclear Theory
Strong Interactions of Elementary Particles (Experiment)
Theory of Strong Interactions and General Theory of Elementary Particles
Ultrahigh Energies, Cosmic Rays
Weak Interactions of Elementary Particles.

Electromagnetic Interactions of Elementary Particles

The $\bar{p} + p \rightarrow \bar{l} + l$ Reaction with Polarized Particles. S. M. Bilen'kiĭ and R. M. Ryndin – 57.
Photoproduction of Neutral Pions Near to the Threshold. A. M. Baldin, B. B. Govorkov, S. P. Denisov, and A. I. Lebedev – 62.
On the Decay $\pi \rightarrow \mu + \nu + e^+ + e^-$. S. A. Pikin and Yu. I. Kharkats – 207.
The Process of Pair Production by Fast Muons. V. D. Mikhaĭlov – 223.
Electromagnetic Production of Hadrons and Unitary Symmetry. M. P. Rekalo – 364.
Mass Difference of Rho Mesons. V. G. Vasev and V. G. Pivovarov – 363.
Production of Pseudoscalar Mesons by Colliding Electron-Positron Beams. I. G. Dzhafarov – 477.
Partial Transitions in the Photoproduction of Charged π Mesons from Light Nuclei – V. V. Balashov, G. Ya. Korenman, and T. S. Macharadze – 479.
Electromagnetic Mass Difference of Baryons and SU_6 Symmetry. A. D. Dolgov, L. B. Okun', I. Ya. Pomeranchuk, and V. V. Solov'ev – 521L.
Polarization Effects in the Scattering of Neutrinos by Electrons, with Account of Radiative Corrections. A. M. Perelomov – 746.
On a Possibility of Determining Nuclear Form Factors for Time-Like Momentum Transfers. M. P. Rekalo – 760.

Methods, Accelerators

Stability of Motion of a Charged Particle in a Magnetic Field. M. M. Khapaev – 193.
Form of Momentum Spectrum in Particle Collision. K. D. Tolstov – 597.
Analysis of Methodological Errors in the Study of Nuclear Interactions by the Emulsion Method. V. S. Murzin – 599.
Coherent Radiation of 700–6000 BeV Cosmic Ray μ Mesons in a Laminar Medium. F. R. Arutyunyan, K. A. Ispiryan, and A. G. Oganesyan – 604.
Dynamic Polarization of Protons in a Large-Volume Target. V. I. Lushchikov and Yu. V. Taran – 609.
Analysis of Experimental Data Satisfying Distributions of the type $x^m dx$. N. N. Roĭnishvili and K. V. Mandritskaya – 733.
Planning of Experiments to Discriminate between Alternative Curves. V. V. Fedorov and N. P. Klepikov – 736.

Nuclear Properties and Nuclear Spectroscopy (Experiment)

Beta Decay

Search for Positron Emitters Among the Products of U^{235} Thermal Neutron Fission. V. P. Élsmont and V. A. Yurgenson – 129.
The K-Capture Fraction of Ge^{66}, Ge^{69}, and As^{72}. Zing Hesung, N. S. Mal'tseva, V. N. Mekhedov, and V. N. Rybakov – 132.
Type of Interaction in the β Decay of Ne^{23}. G. R. Kartashov, N. A. Burgov, and A. V. Davydov – 523.
Positrons of Lu^{171}. V. D. Vitman, B. S. Dzhelepov, and V. Ya. Efremov – 669.

Energy Levels and Transformations

New Data for the Re^{188} Decay Scheme. V. D. Vitman, N. A. Voinova, and B. S. Dzhelepov – 133.
New Isomers of Sc^{43}, In^{109}, and Xe^{125}. A. G. Demin and Yu. P. Kushakevich – 138.
On the Two-Hour (7.7 ksec) Isomer of Lu^{168}. K. Ya. Gromov, V. Hnatowicz, A. S. Danagulyan, A. T. Strigachev, and V. S. Shpinel' – 140.
New Neutron-Deficient Zirconium Isotopes. N. G. Zaĭtseva, V. V. Kuznetsov, M. Ya. Kuznetsova, Ma Ho Ik, G. Muziol, Han Shu-jun, Chou Mo-lung, and V. G. Chumin – 273.
The $Lu^{167} \rightarrow Yb^{167} \rightarrow Tu^{167}$ Decay Chain. K. Ya. Gromov, A. S. Danagulyan, A. T. Strigachev, and V. S. Shpinel' – 276.
Pu^{241} Alpha Spectrum and U^{237} Energy Levels. S. A. Baranov, M. K. Gadzhiev, V. M. Kulakov, and V. M. Shatinskiĭ – 397.
Investigation of Decay Scheme of Tb^{152}. K. Ya. Gromov, D. A. Enchev, Zh. T. Zhelev, I. Zvol'skiĭ, V. G. Kalinnikov, V. V. Kuznetsov, Ma Ho Ik, G. Muziol, and Han Shu-jun – 401.
The New Isomers Ru^{95} and Ru^{101}. V. L. Chikhladze – 520.
Lifetime of the 2^+ (603-keV) Level in Te^{124}. A. F. Akkerman, V. L. Kochetkov, and V. N. Chekanov – 527.
The Gamma Spectrum of 9.2-hour Eu^{152*}. B. S. Dzhelepov, N. N. Zhukovskiĭ, and A. G. Maloyan – 671.
The Isomers Gd^{159m} and Sb^{117m}. V. T. Gritsyna, A. P. Klyucharev, and V. V. Remaev – 676.
The Decay of Ho^{161}. A. A. Abdurazakov, K. Ya. Gromov, V. V. Kuznetsov, Ma Ho Ik, G. Muziol, F. Molnar, A. Molnar, F. Mukhtasimov, and Han Shu-jun – 678.
Three Hour Activity of Lutecium. M. P. Avotina, E. P. Grigor'ev, B. S. Dzhelepov, and A. V. Zolotavin – 684.
Spectrum of Internal-Conversion Electrons of the Nuclear Reaction $Te^{128}(\alpha, 2n)Xe^{130}$. V. L. Chikhladze – 802.

Nuclear Reactions and Scattering by Nuclei at High Energies (>100 MeV)

Experiment

Upper Limit of the Cross Section for Coherent Interactions

of π^- Mesons With Heavy Emulsion Nuclei. S. A. Azimov, E. V. Beter, and U. G. Gulyamov—48.

Li^8 Production in Disintegrations of C^{12} by High-Energy Protons. R. V. Afanas'eva, O. V. Lozhkin, V. M. Mal'tsev, and Yu. P. Yakovlev—51.

Total Cross Section for Interaction of 630 MeV Neutrons with Protons and Carbon Nuclei. Yu. M. Kazarinov, V. I. Satarov, and Yu. N. Simonov—191.

Double Charge Exchange of π^- Mesons. Yu. A. Batusov, S. A. Bunyatov, V. M. Sidorov and V. A. Yarba—271.

Knock-On of Alpha Particles from Be Nuclei by 660 MeV Protons. A. P. Zhdanov, V. N. Kuz'min, and R. M. Yakovlev—447.

The $N^{14}(\pi, 2p)3\alpha$ Reaction with 80-MeV π^+ Mesons. B. P. Afanas'ev and V. I. Ostroumov—463.

Study of Secondary Reactions in Bombardment of Copper by 140–660 MeV Protons. V. N. Mekhedov, V. N. Rybakov, N. S. Mal'tseva, S. P. Makarov, and Wang Ch'uan P'eng—592.

Theory

Cascade Mechanism of the High Energy Nuclear Reactions. I. Total Inelastic Cross Sections, Angular and Energy Distribution of the Fast Particles. F. P. Denisov, R. A. Latipova, V. P. Milovanov, and P. A. Cerenkov—234.

Nuclear Reactions and Scattering (Experiment)

(Classified by primary particles, except fission)

Reactions with γ and e

Effect of Nonmonochromaticity in Measurements of the Cross Section for Gamma Quantum Absorption by Light Nuclei. G. V. Danilyan—31.

Angular Distribution of Resonant Scattering of 23.8 keV Gamma Quanta from Sn^{119} Nuclei. V. A. Komissarova, A. A. Sorokin, and V. S. Shpinel'—444.

The Energy Distributions of Photoprotons from Si^{28}. B. I. Goryachev, B. S. Ishkhanov, I. M. Kapitonov, V. G. Shevchenko, and B. A. Yur'ev—716.

Reactions with Protons

Elastic Scattering of Low-Energy Protons by Isotopes of Chromium, Iron, Nickel and Cobalt. V. Ya. Golovnya, A. P. Klyucharev, B. A. Shilyaev, and N. A. Shlyakhov—32.

Analysis of Proton-Tritium Elastic Scattering Above the $T(p,n)He^3$ Threshold. Yu. G. Balashko and I. Ya. Barit—153.

Reactions with Neutrons

Neutron-Capture Cross Sections in Scandium and the Radiation Widths of the Sc^{45} and Cl^{35} Resonances. S. A. Romanov and F. L. Shapiro—159.

Gamma-Ray Spectra from the (n,γ) Reaction in Cr^{50}, Cr^{52}, and Cr^{53}. E. A. Rudak and E. I. Firsov—164.

Spectrum of Internal-Conversion Electrons Produced Upon Capture of Thermal Neutrons by Indium. M. K. Balodis, V. A. Bondarenko, P. T. Prokof'ev, and L. I. Simonova—175

Search for the (n,α) Reaction in Heavy Nuclei Under the Action of Thermal Neutrons. V. N. Andreev and S. M. Sirotkin—177.

Excitation of the Levels of La^{139} and Pr^{141} in Inelastic Neutron Scattering. V. A. Bukarev and V. I. Popov—316.

γ Radiation from the Inelastic Interaction of 14-MeV Neutrons With Magnesium, Aluminum, and Sulfur Nuclei. V. N. Bochkarev and V. V. Nefedov—574.

Interaction of 14.1-MeV Neutrons with Tritium. G. E. Velyukhov and A. I. Prokof'ev—719.

Reactions with d and t

Neutron Spectra and Angular Distributions in (d,n) Reactions in Nuclei with Medium Atomic Weights. V. V. Okorokov and D. L. Tolchenkov—320.

Neutron Polarization in (d,n) Stripping Reactions with $l_p = 1$. N. P. Babenko, B. A. Bibichev, I. O. Konstantinov, A. P. Moskalev, and Yu. A. Nemilov—323.

Neutron Emission in Interactions Between Tritons and Boron Nuclei. P. I. Vatset, L. I. Kolesnikov, and S. G. Tonapetyan—579.

Circular Polarization of Gamma Rays Associated with the Reaction $B^{10}(d,p)B^{11}$. N. Szentpétery, J. Erö, I. Fodor, and J. Zimányi—714.

Investigation of Angular and Energy Correlations in the $Ni(d,np)Ni$ Reaction by the Neutron-Proton Coincidence Method. O. F. Nemets, M. V. Sokolov, and B. G. Struzhko—722.

Reactions with He^3 and α

He^3—Light Nucleus Interaction Cross Sections. O. D. Brill'—37.

The Reaction (He^3,α) on Be^9, N^{14}, and O^{16}. K. P. Artemov, V. Z. Gol'dberg, B. I. Islamov, V. P. Rudakov, and I. N. Serikov—726.

Reactions with Heavy Nucleons

Proton Decay of Nuclei with $Z > 50$. V. A. Karnaukhov and G. M. Ter-Akop'yan—41.

Neutron Spectra in Interactions of Heavy Ions with Intermediate Nuclei. H. Kumpf, L. Kumpf, and Shi Shuang-hui—186.

Elastic Scattering of He^3 Ions by Be^9, N^{14}, and O^{16}. K. P. Artemov, V. Z. Gol'dberg, B. I. Islamov, V. P. Rudakov, and I. N. Serikov—450.

Proton Emitter Based on the Ru + O^{16} Reaction. V. A. Karnaukhov, G. M. Ter-Akop'yan, L. A. Petrov, and V. G. Subbotin—581.

Coulomb Excitation

Multiple Coulomb Excitation of Nuclei. I. Berson—325.

Coulomb Excitation of the First 2^+ Levels of Zr^{90} and Zr^{96}. Yu. P. Gangrskiĭ and I. Kh. Lemberg—731.

Nuclear Fission

Spontaneously Fissile Isomer with 0.9 Msec Half-Life. Yu. V. Lobanov, V. I. Kuznetsov, V. P. Perelygin, S. M. Polikanov, Yu. Ts. Oganesyan, and G. N. Flerov—45.

Search for Positron Emitters Among the Products of U^{235} Thermal Neutron Fission. V. P. Elsmont and V. A. Yurgenson—129.

Energy Characteristics of Fragments from Fission of Th^{232} and U^{238} by Charged Particles. B. A. Bochagov, S. S. Vasil'ev, G. G. Semenchuk, and G. E. Solyakin—328.

Angular Distribution of Fragments in Photofission of U^{238} and Th^{232} by γ Rays from the Reaction $F^{19}(p,\alpha\gamma)O^{16}$. A. S. Soldatov, Z. A. Aleksandrova, L. D. Gordeeva, and G. N. Smirenkin—335.

Energy Dependence of the Angular Anisotropy of the Gamma Radiation Accompanying the Fission of U^{235}. G. A. Petrov – 338.

Mass and Kinetic Energy Distributions of Fragments from Fission of Th^{232} by 12-MeV Deuterons. Yu. A. Nemilov, V. V. Pavlov, Yu. A. Selitskiĭ, S. M. Solov'ev, and V. P. Éismont – 453.

Neutron Emission from Fragments of U^{233}, U^{235}, and Pu^{239} in Thermal-Neutron Fission. V. Apalin, Yu. Gritsyuk, I. Kutikov, V. Lebedev, and L. Mikaélyan – 457.

Kinetic Energy of Fragments and Energy Balance in Thermal Neutron Fission of U^{235} – V. Apalin, Yu. Gritsyuk, I. Kutikov, V. Lebedev, and L. Mikaélyan – 584.

Nuclear Theory

Nuclear Structure

A Nucleon-Photon Hamiltonian for Sperical Nuclei. S. T. Belyaev – 3.

On the Energy Spectra of Odd Spherical Nuclei. S. T. Belyaev and V. G. Zelevinskiĭ – 10.

The Interaction of Beta and Gamma Bands in Deformed Nuclei. V. V. Lomonosov and M. G. Urin – 22.

Isotopic Shift and Quadrupole Moments of Near-Spherical Nuclei. G. G. Bunatyan and M. A. Mikulinskiĭ – 26.

Absorption of γ Rays and Stopped π^- Mesons by Nuclei with Two-Nucleon Emission and the Structure of Light Nuclei T. I. Kopaleĭshvili – 686.

Excitation Spectra of Tl^{208} and Bi^{208}. B. L. Birbrair and V. N. Guman – 693.

Photonuclear Reactions with α-Particle Emission and Four-Particle Correlations in Light Nuclei. R. I. Dzhibuti, V. I. Mamasakhlisov, and T. S. Macharadze – 696.

Isospin in Heavy Nuclei. L. A. Sliv and Yu. I. Kharitonov – 804.

Nuclear Models

Resonance Transitions of Waves in the Presence of Splitting. V. G. Baryshevskiĭ, V. L. Lyuboshitz and M. I. Podgoretskiĭ – 19.

Mass Difference of Near-Magic Nuclei. É. E. Sapershteĭn and M. A. Troitskiĭ – 284.

Excitation of Nuclear Rotational States in Nucleon Scattering. S. I. Drozdov – 290.

Influence of Surface Vibrations in Strongly Deformed Nuclei on the Character of Their Dipole Excitation. S. F. Semenko – 295.

Separation of the Angle Variables in the Equations for the Effective Field in Spherical Nuclei. Yu. V. Gaponov and V. P. Kralnov – 410.

Compressibility and Polarizability of Nuclear Matter. A. S. Tyapin – 416.

Quadrupole Moments of Odd Spherical Nuclei. V. A. Belyakov and S. V. Khudyakov – 532.

Electromagnetic Transitions from Collective States. P. Fogel' – 538.

Isotopic Shift of Hyperfine Splitting of Atomic Levels. M. A. Troitskiĭ – 543.

Concerning One Method of Calculating the Cross Sections in the Optical Model. V. V. Babikov – 701.

Possible Application of Evaporation Theory to Multiply Charged Particle Emission by Heavy Nuclei. F. G. Lepekhin, M. M. Makarov, and L. N. Tkach – 703.

Many-Particle Emission

Calculation of Magnetic Moments of Spherical Nuclei. M. A. Troitskiĭ and V. A. Khodel' – 143.

Level Density and Thermodynamic Functions of the Atomic Nucleus with Allowance for Pairing Correlation Effects. Yu. T. Grin' and V. M. Strutinskiĭ – 299.

On the Effect of Three-Body Forces in H^3 and He^3. Yu. P. Shcherbin – 667.

Theory of Nuclear Reactions

An Analytical Version of the Quasiclassical Theory of the Angular Distribution of the Products of a One-Nucleon Transfer Reaction. J. Grabowski and B. N. Kalinkin – 149.

Account of Initial and Final State Interactions in Direct Nuclear Reactions by the Diagram Summation Method. É. I. Dolinskiĭ, L. D. Blokhintsev, and A. M. Mukhamedzhanov – 304.

Quadrupole Giant Resonance in Heavy Nuclei. A. A. Lushnikov and M. G. Urin – 311.

A Simple Description of the Angular Distribution of Compound Nucleus Decay Products Following a Direct Interaction. V. M. Strutinskiĭ – 421.

The Effect of Pairing on the Penetration of Two Particles Through a Centrifugal Barrier. V. I. Goldanskiĭ – 426.

The Method of Quantum Green Functions in Nuclear Reaction Theory. F. A. Zhivopistsev – 429.

Energy Distributions of Recoil Nuclei in Evaporation. F. P. Denisov – 434.

Inelastic Nucleon-Deuteron Scattering at Low and Medium Energies. A. M. Popova and Muskalu Shtefan – 555.

Unified Theory of Nuclear Resonance Reactions. Partial Reaction Cross Sections. I. V. Gordeev – 561.

On the Calculation of the Nucleon-Nucleon Potential Scattering Parameters at Low Energies – V. V. Babikov – 567.

Form of the Fissioning Nucleus at the Saddle Point and the Liquid-Drop Model of the Nucleus. V. M. Strutinskiĭ – 588.

The Neutron-Deuteron Doublet Scattering Length and the Three-Nucleon Bound State with Account of Tensor Forces. A. G. Sitenko and V. F. Kharchenko – 708.

Theory of Atomic and Molecular Phenomena in Nuclear Processes

Multiple Scattering of a Narrow Beam of Fast Neutrons. G. M. Budyanskiĭ – 155.

On Atomic Ionization in Beta Decay. E. L. Feĭnberg – 438.

Polarization Effects in Neutron Diffusion. Yu. N. Kazachenkov – 547.

Strong Interactions of Elementary Particles

Nonresonant Interactions of p, n, π, $\bar{p}$, and $\bar{n}$

Polarization in Elastic Proton-Proton Scattering at High Energies. V. P. Kanavets, I. I. Levintov and B. V. Morozov – 65.

Quasielastic $\pi^- n$ Interactions at 9 GeV. T. M. Gramenitskiĭ, T. Kanarek, V. M. Mal'tsev, A. Prokes, and L. A. Tikhonova – 78.

Parameters for Triple Scattering of Protons by Carbon Nuclei at 660 MeV and a Comparison of the Results of the Analysis of NN and pC Scattering. L. S. Azhgirei, Yu. P.

Kumekin, S. B. Nurushev, V. L. Solov'yanov, and G. D. Stoletov – 84.

Measurement of the Energy Dependence of the Elastic *pp* Scattering Differential Cross Section at Energies from 3 to 9.5 BeV. V. P. Kanavets, I. I. Levintov, B. V. Morozov, and N. A. Nikiforov – 90.

Total Cross Sections for Interaction of Neutrons with Protons and Neutrons from 2.6 to 8.3 BeV. V. S. Pantuev, M. N. Khachaturyan, and I. V. Chuvilo – 93.

Pion Charge Exchange Cross Section at 4 GeV/*c*. M. A. Azimov, V. S. Pantuev, L. V. Sil'vestrov, M. N. Khachaturyan, and I. V. Chuvilo – 100.

Angular Dependence of Transverse Pion Momentum. É. G. Boos, A. Kh. Vinitskiĭ, and Zh. S. Takibaev – 102.

Measurement of the Real Part of the $\pi^- p$ Elastic Scattering Amplitude for 3.5 BeV. V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov, L. A. Slepets, I. M. Sitnik, and L. N. Strunov – 127.

Elastic *pp* Scattering at 1.45 BeV. S. P. Kruchinin, K. N. Mukhin, A. S. Romantseva, I. A. Svetlolobov, M. M. Sulkovskaya, S. A. Chueva, and R. S. Shlyapnikov – 225.

Total Cross Sections of the Reaction $\pi^- + p \to \pi^+ + \pi^- + n$ Near Threshold and Angular Distribution of Secondary Particles. Yu. A. Batusov, S. A. Bunyatov, V. M. Sidorov, and V. A. Yarba – 374.

Small-Angle Elastic *pp* and *pd* Scattering in the Energy Interval 2–10 GeV. L. F. Kirillova, V. A. Nikitin, V. S. Pantuev, V. A. Sviridov, L. N. Strunov, M. N. Khachaturyan, L. G. Khristov, M. G. Shafranova, Z. Korbel, L. Rob, S. Damyanov, A. Zlateva, Z. Zlatanov, V. Iordanov, Kh. Kanazirski, P. Markov, T. Todorov, Kh. Chernev, N. Dalkhazhav, and T. Tuvdendorzh – 379.

Inelastic *pp* Interactions with Low Momentum Transfer. S. A. Azimov, B. P. Bannik, T. Visky, U. G. Gulyamov, Do In Seb, B. G. Rakhimbaev, and L. I. Chernova – 485.

Elastic Scattering of Positive π Mesons by 3.2 BeV/*c* Protons. A. S. Vovenko, A. G. Grachev, M. F. Likhachev, Yu. A. Matulenko, I. S. Savin, Suy Yung-Ch'ang, and Ho Yuan-Fu – 488.

The Reaction $\pi^- p \to \pi^+ + \pi^- n$ Near Threshold and $\pi\pi$ Interaction. Yu. A. Batusov, S. A. Bunyatov, V. M. Sidorov, and V. A. Yarba – 492.

Further Refinement of the Phase Shifts of *pp* Scattering at 435 MeV. L. S. Azhgirei – 620.

Investigation of Four-Prong Stars in $\pi^- p$ Interactions at 3.5 GeV/*c* Primary Momentum. M. S. Ainutdinov, N. V. Vasil'eva, S. M. Zombkovskiĭ, Ya. M. Selektor, and V. N. Shulyachenko – 763.

Resonant Interactions of p, n, π, $\bar{p}$, and $\bar{n}$

Determination of the Contribution of the (3/2,3/2) Isobar to the Inelastic $\pi^- p$ Interaction Processes at 344 MeV Meson Kinetic Energy. T. D. Blokhintseva, V. G. Grebinnik, V. A. Zhukov, V. A. Kravtsov, G. Libman, L. I. Nemenov, G. I. Selivanov, and Yüan Jung-fang – 71.

On the $f^0 \to \pi^0 + \pi^0$ Decay of the f^0-Meson. V. V. Barmin, A. G. Dolgolenko, Ya. S. Elenskiĭ, I. A. Erofeev, Yu. S. Krestnikov, A. G. Meshkovskiĭ, G. D. Tikhomirov, Yu. V. Trebukhovskiĭ, and V. A. Shebanov – 230.

Resonant Interactions of Strange Particles

Baryon Resonances in $\pi^- p$ Interactions at 7.5 BeV With Strange-Particle Formation. V. A. Belyakov, V. I. Veksler, N. M. Viryasov, E. N. Kladnitskaya, G. I. Kopylov, V. N. Penev, and M. I. Solov'ev – 240.

Meson Resonances in $\pi^- p$ Interactions at 7.5 BeV With Strange Particle Production. V. A. Belyakov, V. I. Veksler, N. M. Viryasov, E. N. Kladnitskaya, G. I. Kopylov, V. N. Penev, and M. I. Solov'ev – 249.

Detection of 1280-MeV $K^0\overline{K}^0$ Resonance. V. V. Barmin, A. G. Dolgolenko, I. A. Erofeev, Yu. S. Krestnikov, A. G. Meshkovskiĭ, G. D. Tikhomirov, Yu. V. Trebukhovskiĭ, and V. A. Shebanov – 623.

Theory of Strong Interactions and General Theory of Elementary Particles

Symmetry (Including Weak and Electromagnetic Interactions). Transformations

The $\Delta T = 1/2$ Rule for Hadron Decay. I. Yu. Kobzarev and L. B. Okun' – 111.

On Relativistic Angular Momentum Theory. P. Winternitz, Ya. A. Smorodinskiĭ, and U. Uhlíř – 113.

Supercharge and Supercharged Particles – L. B. Okun' – 211.

The Okubo Mass Formula in Higher Orders. M. P. Rekalo – 259.

Possibility of the Existence of a Boson 27–Supermultiplet 1^+. V. V. Vladimirskiĭ – 269.

Violation of *CP*-Invariance and Interference Phenomena in the Decay of a Neutral K Meson into Two π Mesons. V. L. Lyuboshitz, É. O. Okonov, M. I. Podgoretskiĭ and Wu Tsung-fan – 354.

Electromagnetic Production of Hadrons and Unitary Symmetry. M. P. Rekalo – 364.

Unitary Multiplet Mixtures. V. B. Mandel'tsveig and M. B. Menskiĭ – 392.

Some Aspects of the Physical Applications of the Unitary Groups – A. A. Komar and V. I. Man'ko – 496.

A Strong Interaction Symmetry Model Based on Sp_6. B. V. Struminskiĭ – 501.

Electromagnetic Mass Difference of Baryons and SU_6 Symmetry. A. D. Dolgov, L. B. Okun', I. Ya. Pomeranchuk, and V. V. Solov'ev – 521.

Some Consequences of the Application of Unitary Symmetry Theory to the Systematics of Strongly Interacting Particles. K. S. Marish – 629.

Invariant Expansions of Relativistic Amplitudes and Subgroups of the Proper Lorentz Group. P. Winternitz and I. Fris – 636.

Note Concerning *CP* Parity. L. B. Okun' – 670.

Vector Constants of Strange Currents in the Second Approximation in Semi-Strong Interaction. V. I. Zakahrov and I. Yu. Kobzarev – 749.

The Structure of G_2 Multiplets. G. Mandel'tsveig – 787.

Note on *CP*-odd Interactions with $|\Delta S| \geq 1$. L. B. Okun' – 806.

Reactions with Production of Two Mesons and Unitary Symmetry. V. P. Belov – 809.

Theory of Scattering and Reactions

The $\bar{p} + p \to \bar{l} + l$ Reaction with Polarized Particles. S. M. Bilen'kiĭ and R. M. Ryndin – 57.

Unitary Description of Reactions with Formation of Several Nonrelativistic Particles. R. B. Gorelik, N. P. Klepikov, and V. A. Yudin – 105.
Concerning the Calculation of the Parameters of Scattering by a Tensor Potential. V. V. Babikov – 261.
Concerning Hyperon Production in πN and NN Collisions. I. A. Kuchin and P. A. Usik – 389.
Interaction of Antiproton With Proton With Account of Coulomb Forces and Mass Difference Between the Neutron and the Proton at Nonrelativistic Energies. Yu. F. Strokov – 507.
Properties of Branch Points Generated by Fermion Regge Poles. S. A. Gurvits – 644.
The Lehmann Representation and the Photon Mass. A. I. Vaĭnshteĭn, V. V. Sokolov, and I. B. Khriplovich – 648.
The Asymptotic Behavior of Cross Sections and Potential Scattering – I. B. Khriplovich – 651.
KK-Scattering at Low Temperatures. V. A. Lyul'ka and A. A. Startsev – 778.
Concerning the Applicability of the Isobar Model for the Production of Λ Hyperons in $\pi^- p$ Interactions. V. F. Vishnevskiĭ, Tu Yuan-tsái, V. I. Moroz, A. V. Nikitin, Yu. A. Troyan, Chiang Shao-chun, Chang Wen-yu, B. A. Shakhbazyan, and Yen Wu-kuang – 787.
Theory of Crossing Symmetry and Helicity Amplitudes. E. L. Surkov – 792.

General Theoretical Problems

Galactic Hypercharge Field and the Two-Pion Decay of the Longlived Neutral K Mesons. V. L. Lyuboshitz, É. O. Okonov, and M. I. Podgoretskiĭ – 349.
Reduction Formulas and Representations of Amplitudes for n-Vertex Graphs. B. N. Valuev – 510.
Elimination of Unphysical Singularities in the Feinberg-Pais Theory of Weak Interactions. A. A. Slavnov and A. E. Shabad – 514.
Higher-Order Corrections in the Field Theory of Weak Interactions. É. V. Gedalin, O. V. Kancheli, and S. G. Matinyan – 630.
Asymptotics of Diverging Feynman Graphs. O. I. Zav'yalov and B. Stepanov – 658.

Ultrahigh Energies, Cosmic Rays

Experiment

Lateral Distribution of Muon Fluxes in Extensive Air Showers. B. A. Khrenov – 384.
Charge Exchange of Nucleons in Inelastic NN Interactions at Very High Energies. I. A. Kuchin, L. A. San'ko, and P. A. Usik – 627.
Nuclear-Active High-Energy Particles and the Accompanying Cosmic-Ray Extensive Air Showers. E. A. Murzina, S. I. Nikol'skiĭ, E. I. Tukish, and V. I. Yakovlev – 768.

Theory

Contribution to the Analysis of Muon Absorption in Matter at Large Depths. Yu. N. Vavilov, G. I. Pugacheva, and V. M. Fedorov – 54.
Pion Emission and Beta Decay of a Proton Moving in a Magnetic Field. G. F. Zharkov – 120.

Weak Interactions of Elementary Particles

Experiment

Two Cases of the Radiative Decay $K^+ \to \pi^+ + \pi^0 + \gamma$. V. S. Kurbatov, É. I. Mal'tsev, A. I. Maslakov, I. V. Chuvilo, and A. I. Shklovskaya – 195.
Michel Parameter in $\mu^- - e^-$ Decay. J. B. Pontecorvo and R. M. Sulyaev – 200.
Existence of a Nucleon-Nucleon Potential That Does Not Conserve Spatial Parity. Yu. G. Abov, P. A. Krupchitskiĭ and Yu. A. Oratovskiĭ – 341.
Disintegration of Emulsion Nuclei by Slow μ^- Mesons. A. O. Vaĭsenberg, É. D. Kolganova, and N. V. Rabin – 467.
Type of Interaction in the β Decay of Ne^{23}. G. R. Kartashov, N. A. Burgov, and A. V. Davydov – 523.
Suggested Experiments on Low-Energy Antineutrino Physics. L. A. Mikaélyan, P. E. Spivak, and V. G. Tsinoev – 611.
Investigation of the Energy Spectra and Angular Correlations of Particles in $K_3^0 \to \pi^- + e^+ + \nu$ Decay. D. M. Kotlyarevskiĭ, A. N. Mestvirishvili, D. Neagu, É. O. Okonov, N. I. Petrov, V. A. Rusakov, L. V. Chkhaidze, and Wu Tsung-fan – 738.

Theory

The Differential Cross Sections for the Processes $e^+e^- \to \mu^+\mu^-\nu_e\bar{\nu}_e$ and $e^+e^- \to \mu^+\mu^-\nu_\mu\bar{\nu}_\mu$. A. D. Dolgov – 60.
The $\Delta T = 1/2$ Rule for Hadron Decay. I. Yu. Kobzarev and L. B. Okun' – 111.
Scattering of Antineutrinos by Electrons. A. A. Bogush, A. I. Bolsun, and I. S. Satsunkevich – 204.
On the Decay $\pi \to \mu + \nu + e^+ + e^-$. S. A. Pikin and Yu. I. Kharkats – 207.
A Possibility for Detecting the Intermediate Meson with Mass Larger Than Twice the Nucleon Mass. I. M. Zheleznykh and M. A. Markov – 215.
The Cross Sections for the Processes $e^\mp + e^- \to e^\mp + \mu^- + \nu_e + \bar{\nu}_\mu$. A. M. Badalyan – 219.
The Angular Correlation Between π Meson and Leptons and the Determination of Form-factors in $K_{\mu 3}$ Decay. I. S. Tsukerman – 221.
Galactic Hypercharge Field and the Two-Pion Decay of the Longlived Neutral K Mesons. V. L. Lyuboshitz, É. O. Okonov, and M. I. Podgoretskiĭ – 349.
Violation of CP-Invariance and Interference Phenomena in the Decay of a Neutral K Meson into Two π Mesons. V. L. Lyuboshitz, É. O. Okonov, M. I. Podgoretskiĭ and Wu Tsung-fan – 354.
Influence of Spin Effects on the Annihilation and Creation of Electron-Positron Pairs in Weak Interactions. A. A. Sokolov, Yu. P. Ivanov, and D. V. Gal'tsov – 361.
Spectra of K_{e3} Decay. I. V. Lyagin – 473.
Energy Spectra of Longitudinally Polarized Recoil Electrons in Neutrino (Antineutrino) – Electron Scattering. B. K. Kerimov and Yu. I. Romanov – 613.
Intermediate Meson Creation by Colliding Beams. A. D. Dolgov and V. V. Solov'ev – 615.
Higher-Order Corrections in the Field Theory of Weak Interactions. É. V. Gedalin, O. V. Kancheli, and S. G. Matinyan – 630.
Polarization Effects in Scattering of Neutrinos by Electrons with Account of Radiative Losses. A. M. Perelomov – 746.
Vector Coupling Constants of Strangeness-Violating Currents in the Second Approximation in Semi-Strong Interaction. V. I. Zakharov and I. Yu. Kobzarev – 749.

Unitary Symmetry and K_{l4} Decay. V. I. Zakharov – 751.
A Covariant Method of Calculating Cross Sections and Its Application to Some Reactions Induced by Neutrinos. I. M. Zheleznykh – 753.
Note on CP-odd Interactions with $|\Delta S| > 1$. L. B. Okun' – 806.
Current-Current Interaction and the Admixture of $\Delta T = 3/2$ in the Decay of the Λ Hyperon. I. Yu. Kobzarev and L. B. Okun' – 807.